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RESULTS ACCOMPLISHED

In Distribution of Light and Power by Alternating Currents.*

BY W. L. R. EMMET.

(Continued from June.)

Fig. 5 illustrates the two-phase, three-wire system, which has been used to some extent both for high tension distribution and for distribution by secondary mains. The principal advantage in this system is that it requires one less conductor than the four-wire, two-phase system. Its disadvantages are that the insulation of the apparatus is subjected to a voltage forty-two per cent higher than that which is available in transmission, and that the self-induction in the lines and transformers causes an unbalancing of the voltages on the two sides of the system, accompanied by the distortion of the phase variation. The extent of this unbalancing depends upon existing conditions, and is very different in different cases.

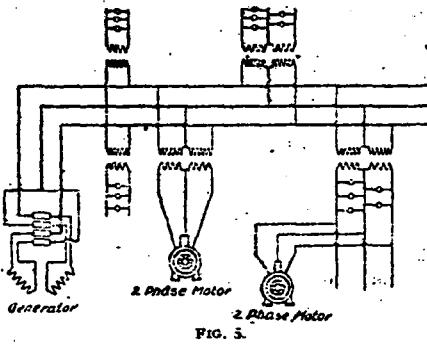


FIG. 5.

Fig. 6 shows diagrammatically the distribution of voltage with a given balance load on a two-phase, four-wire circuit, and on the same circuit with one wire discarded, the third being used as a common return for the two sides of the system. S F and E G represent the two generated voltages on the four-wire, two-phase system. F' F'' and G' G'' represent the electromotive forces of self-induction in the lines of the separate two-wire branches of the circuit. F' F'', G' G'' represent the resistance drop in the two branches. E F'' and E G'', which are still at right angles, represent the two voltages at the end of the line.

The other diagram in Fig. 6 shows the condition on the three-wire circuit. A B and A C represent the generated voltages in quadrature. C C'

*Abstract of paper read before the National Electric Light Association, New York, May 5, 1896.

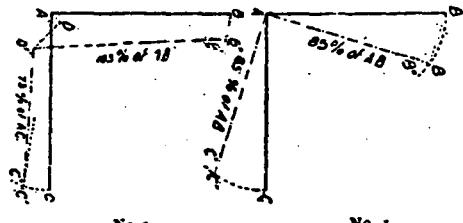
and B B' represent the volts of self induction in the outside conductors. C' C'' and B' B'' represent the volts' drop by resistance in these wires. A D is the resistance drop in the third wire and D D' is the electromotive force of self-induction in the third wire. Since this wire carries forty per cent more current than the others, A D is forty-two per cent greater than C' C'', and B' B'' and D D' bear the same proportion to C C'' and B B'. The length of D' B'' and D' C'' represents the voltages on the two sides of the system at the end of the line. The angle C' D' B'' is the phase relation of these two circuits and is less than ninety degrees. Thus with balanced load the sides of the system are neither equal or in quadrature.

The figures are so proportioned as to represent a circuit of "OO" B. & S. wire operated at 125 cycles with ten per cent resistance drop on the four-wire system, and the same load and the same distance with three wires. With 1,000 volts at the generator in both of these cases, we would have 850 volts on each side with the four-wire system, and with the three-wire system 730 volts on one side and 1,030 on the other. This assumes aerial lines with ordinary spacing of wires. In addition to the systems above described for distributing power by induction motors, we have other means of power distribution by alternating current. The synchronous motor, for certain classes of work, is highly efficient and reliable, and is extensively used, although it will not fill all the requirements of general power distribution. The rotary converter also fills a very important place in the engineering work of the day.

A synchronous motor is simply an alternating dynamo whose functions are reversed. They may be used either on single-phase or polyphase circuits. In its simple form a synchronous motor has no power of starting itself on a single-phase circuit. On a polyphase circuit it starts with more or less torque as an induction motor, and will come to synchronism. As a rule the starting of synchronous motors is not vigorous and is accomplished by a large draught of current; hence their applications are limited. A rotary converter is a synchronous motor of suitable construction, whose armature windings, besides being connected to collector rings, are also connected to a commutator. As the machine revolves at synchronous speed, brushes collect direct current from the commutator, this current being partly rectified and partly generated by the machine.

This machine deals in direct and alternating currents and mechanical power; supply it with any one of the three, it will deliver either one or both of the others. It is most efficient when filling its functions as a converter from alternating to direct currents. Its capacity is then greater and its efficiency higher than when it runs as a generator or as a motor.

To illustrate the use of the rotary converter, I will describe an application now under consideration. The company in question is operating three stations; one of these is very large and centrally situated, with condensing water and every facility for the cheap generation of current. Each of the other stations is about two miles from the main station; both work non-condensing. One of these stations delivers current only on the direct-current, three-wire system, while the other, in addition to similar work, carries a considerable load of light load. In this case the following plan is considered:



No. 2.

No. 1.

At the two smaller stations rotary converters would be installed, and would deliver only direct current in one case, while in the other they would also act as motors to operate arc machines through a countershaft, to which they would be belted with clutch pulleys. Suitable step-down transformers would connect the rotary converters to a high tension line leading to the main station. At the same station three-phase generators of large capacity would be installed. These generators would be designed to deliver both three-phase alternating currents to step-up transformers and also direct currents at about 250 volts to the outside conductors of the three-wire system. They would be directly coupled to engines. These machines would deliver current simultaneously, in any proportion, to the direct-current three-wire system, to the rotary converter, or to lines distributing three-phase power. It is proposed to operate these machines at a frequency of twenty-five cycles per second, this being well adapted to

the direct-current work and also to three-phase power distribution.

In this plant an entirely independent control of direct-current pressure within a wide range would be necessary at the main and sub-stations. This would be effected without the introduction of idle currents by the use of a novel form of three-phase induction regulator connected to the alternating leads of each rotary converter. These regulators would give a wide range of adjustment without any moving connections, and would greatly simplify the operation of the plant and also increase its economy, since the losses introduced by the regulators themselves are very small, and since conditions of general economy are always maintained. Thus a single engine could carry the whole load of the city at certain times.

Another interesting illustration of a combination of alternating and direct currents is found in a case now under consideration. A company controls about 3,000 horse-power in water at a distance of eleven miles from a large town. It is proposed to install three-phase, sixty-cycle generators in 600-kilowatt units. The current from these generators will be transformed to 10,000 volts and carried over three wires to a city substation centrally placed. Here large step-down transformers will be installed, delivering current to 2,000-volt lines, which extend all over the city and carry motors and lights in outlying parts.

In the same station two large Corliss engines are now in operation, and are belted to clutch pulleys on a countershaft, which operates some arc machines and other load. To this countershaft it is proposed to couple with a clutch a large synchronous motor, which will be connected to the 2,000-volt lines. When the water supply is ample the engines will be shut down and the motor will run the shaft. When the water is low, or more power is required, the engines will be run and the synchronous motor will then act as a generator, running in parallel with the transmission line.

In the central part of the town it is proposed to install a system of three-wire mains and a large storage battery. This battery would be installed in a second sub-station, conveniently placed. It would be charged from a pair of direct-current machines, directly coupled to a synchronous motor operating from the 2,000-volt lines. The direct-current machines would be used in connection with the batteries for supplying the three-wire system. The plan here outlined has many very positive advantages.

The pressure on the 2,000-volt system can, within certain limits, be controlled at the substation by adjustments of the field of the synchronous motor. With telephone communication to the power-house, the control will be perfectly easy. The peak of the lighting load being borne by the battery, the generators can be loaded nearly to their full capacity with motors during the day. At night they will charge batteries, using water which would otherwise run to waste.

In both the plants described the cost of labor would be very small, one man being enough to operate each of the sub-stations mentioned. The saving of labor in operation should be kept constantly in view in all engineering plans. Some of the greatest advantages in modern apparatus lie in its adaptability to such saving.

An infinite variety of conditions exists in different cities, and the question of electrical distribution must be carefully studied in each case in order that money may be invested to the best advantage. An intimate knowledge, both of the apparatus available and of the commercial conditions, is necessary to an intelligent decision in such cases. It is only through the exercise of intelligence and judgment of a high order that the best results can be obtained.

THE X ray is being used in Paris to distinguish the diamond from its imitations.

The American Federation of Labor and Political Affiliation.

INDIANAPOLIS, IND., June 27, 1896.
To Affiliated Unions—Greeting:

We will soon be in the throes of a political campaign. The passions of men will be sought to be aroused, their prejudices and supposed ignorance played upon and brought into action. The partisan zealot, the political mountebank, the statesman for revenue only, as well as the effervescent, bucolic political party, cure-all sophist and fakir will be rampant. The dear workingman and his interests will be the theme of all alike, who really seek party advantage and success, though civilization fail, labor be crushed and relapse in barbarism be the result.

We are on the eve of events which will place our members, our unions and our entire movement to a most critical test, a test which may mean either a partial dissolution of our organizations, or their growth, extension and development. It is because of the great trust committed to my care that a timely word of advice and warning is given lest our members be taken unawares, fail to profit by the experience of labor organizations which have weathered the storms, and those others whose only evidence of former greatness or existence are their epitaphs, folly, blunders, calamities. "Learn to see in another's calamity the ills which you should avoid" is a maxim which Syrus declared more than nineteen hundred years ago, and it is as applicable to our times as it was when first penned.

Whatever labor secures now or secured in the past is due to the efforts of the workers themselves in their own organizations—the trade unions on trade union lines, on trade union action. When in previous years the workers were either unorganized or poorly organized, the political trickster scarcely ever gave a second thought to the dear workingman and his interests. During the periods of fair or blossoming organization the political soothsayers attempted by cajolery and baiting to work their influence into the organizations to commit them either to one party or another.

There are many organizations which may declare that their unions are safe from such influences, and lulled into a fancied security, permit the virus of political partisanship to be injected into their very being; laying their unions liable to the most malignant diseases of division, antagonism and disruption. Bear in mind that the modern political party freebooter finds his prototype in the one who "For ways that are dark and for tricks that are vain the heathen (politician) Chinee is peculiar."

The movement of labor is now growing stronger day by day. It is becoming more far-reaching than at any time within the history of our country. Each city, town and village now has its unions of labor. The time is coming, if we but meet the intruder at the doors of our meeting rooms, compel him to turn about and take his departure, when there will be few if any of our fellow toilers outside the beneficent influence of organized labor.

The industrial field is littered with more corpses of organizations destroyed by the damning influences of partisan political action than from all other causes combined. Nor must it be at all lost sight of that this does not only apply to local or national trade unions, but also to previous efforts of labor at national federation. The National Labor Union, in its time a great federation, after it committed itself to political partisan action, went to the limbo of movements which no longer moved. After that act it acted no more. No convention of that organization was ever after held.

In the light of that experience the American Federation of Labor has always declared and maintained that the unions of labor are above, and should be beyond the power and influence of political parties. It was with these great object

lessons still daubing before our vision, like the famous writing on the wall, or like the sword of Damocles hanging over our heads by a single thread, which, severed by a failure to profit by past experience, may leave us headless, and the whole body of organized labor bleeding to death, a hapless victim to our folly, serfs or slaves to the cupidity of corporate monopolistic greed, that the A. F. of L. at its last convention resolved that

"Party politics, whether they be Democratic, Republican, Socialistic, Populistic, Prohibition, or any other, shall have no place in the conventions of the American Federation of Labor."

This action, while it directly decrees the course for the conventions of the A. F. of L., is also a declaration of policy and principle, and hence applies equally to all affiliated organizations.

The power of the trade unions is extending to all classes and influencing public sympathy and public judgment. Let us build up our organizations upon a solid basis as of adamant, that they may endure for all time; that they may be our protectors, our defenders in our struggles for justice and right; that we may turn to them in the hour of our trials with the confidence of our manhood maintained, and in the hour of our triumphs to pay them the meed of praise and glory of victories won, men, women and children saved, our civilization and emancipation assured.

Let the watchword be: No political party domination over the trade unions; no political party influence over trade union action.

Long live the trade union! Long live the American Federation of Labor!

Fraternally yours,
SAM'L GOMPERS, President.

A Fine Poem.

From Salt Lake Tribune.

The following poem has some very beautiful passages and is so much superior to the ordinary poetry sent to newspapers that we commend a close reading of it to our readers. Some of the stanzas are worthy of a Longfellow or a Whittier:

Since special legislation
First willed that millionaires
Should spring from mouse-trap vendors
And watered railroad shares,
Our country's been repeating
The precedents of old—
The rights of labor failing
'Neath the dominion of gold.
It needs no ancient memory
To recall those brighter days
Ere the Nation's feet had wandered
From our fathers' truer ways—
When the soil brought forth in plenty
To the toiler's honest hand,
And each sun arose in blessing
On a prosperous, happy land.
Men young in years, among whose locks
Appears no trace of gray,
Now backward glance a little space
And sadly smile and say :
"Oh, well do we remember
Those better days of old,
Ere the money of the people
Was betrayed to profit gold."
"Oh, well do we remember
Those brighter days of yore,
When our country smiled with plenty
With its coffers running o'er;
When the 'mortgage shark,' the usurer,
And all their putrid breed,
Could find no ghoulish profit
In a luckless brother's need."
'Twas then your homestead nestled
In that noble clump of trees,
'Twas then your children gambol'd
'Round a happy mother's knees;
'Twas then you smiled with pride to see
Your storehouse running o'er;
'Twas then your sleep was blessed
For no wolf was at the door.

"Twas then you thought adversity
Could never pull you down,
Ere your knees had learned to tremble
At a money-lender's frown;
Then in your pockets jingled
Good dollars not a few—
Silver dollars; now we've gold—
And gold is not for you.

When you worked beneath the freeman's sun,
In your rich and well-tilled fields,
Or delved with pick and shovel
For the wealth that mountain yields,
You knew that freeman's labor
Would grant a freeman's wage
Of plenty for the present
And a little for old age.

Oh, truly those were happy days!
And your heart was always light,
For you knew a prosperous morrow
Would follow every night;
Then you claimed all the gurdon
Your daily labor gave—
But then you were a freeman,
Not a Wall street banker's slave.

Oh, brothers of the pick, the plow,
The trowel and the spade,
Who sweat within the workshops,
Whose sinewy hands have made
This land, of all, the richest—
Where do you stand to-day?
Where are your old prosperity,
Your homes, your smiles, I pray?

Where are your aspirations.
Your hopes of that "some day"
When you might cease from labor
And lay your tools away?
Where are your prosperous seasons,
Your nights without distress,
Ere yet your hearts had harbored
A pauper's bitterness?

Gone! Swallowed by the masters
For whom you daily toil.
Gone! Pillaged by the foreign hosts
Of greed who own your soil.
Coined into gold to fill the coffers
Of the alien hordes
Against which our forefathers
Unsheathed their patriot swords.

The vultures whet their beaks anew;
The days are few wherein
To battle for those primal rights
The toiler must rewin.
Each day the conquerors grasp your throats
With yet a firmer hold;
Each day you pay more tribute
To the Juggernaut of gold.

Each day you're less a freeman
And a little more a slave;
Each setting sun mow bears away
Some of your power to save
The land you love and honor,
The things you prize the most;
Each moment that you lie supine,
Your cause is nearer lost.

You need no brandished sabre,
You need no shot gun.
Between the dawning and the dark
The battle may be won.
Just speak out like a freeman,
Your ballot boldly give
For the money of the people
And the right to hope and live.

SALT LAKE CITY,
June 21, 1896. H. ALAN CLARKE.

THE frequency of fires in laundries and chemical cleaning shops in German cities led the Government to order an investigation. The work was intrusted to Dr. Richter, of Hanover. In his report he

states that in nearly every case investigated, the cause was traced to electricity generated in the gasoline, and concludes as follows: "It is absolutely certain that benzine (gasoline) under certain circumstances may be thrown into a condition of strong electrical excitement, and that this condition is brought about when certain woolen stuffs are left to macerate therein for any length of time, and combust spontaneously from self-generated electricity. The frequency with which oil tanks are exploded by lightning, is probably explained by a similar condition of electrical excitement in the contents of the tank."

FLASHES.

CHICAGO, ILL.—Mr. Israel Hoagland, of Chicago, has invented an electric plow. The machine was given its first test on June 24th, current being taken from the Lincoln Avenue Electric Railway line. About half an acre of ground was plowed and the experiment was pronounced a success by those who witnessed it.

The Calumet Electric Railway Co. will build a station on South Park avenue and Sixty-third street.

The motive power on the Lake Street Elevated Railroad was changed on June 14th from steam to electricity, the change having cost about \$200,000. Fifty firemen were discharged. The engineers were retained as motormen, at reduced wages.

NEW ORLEANS, LA.—The Edison Electric Light & Power Co. will erect a larger and newer electric light plant.

DEXTER, MO., has voted \$10,000 bonds for the purpose of erecting a municipal electric light plant.

NEW YORK CITY, N. Y.—The Western Electric Co. will erect a \$1,000,000 factory at the corner of Bethune and West streets. This company already own a magnificent factory and office building on Greenwich street.

NEW YORK.—The New York Telephone Co., capital \$16,000,000, has been incorporated. This is said to be a combination of the Western Union and Bell Telephone interests for control of eastern business, in which Gould's friends hold the controlling stock. The directors elected are officers of the Western Union, American Bell Telephone and the Metropolitan Telephone & Telegraph Companies.

BUFFALO, N. Y.—Papers of incorporation for the Cataract Power and Conduit Co. have been filed with the secretary of state. They provide for a company with \$2,000,000 capital, organized for the purpose of acting as distributing agent of electricity for the Niagara Falls Power Co.

NASHVILLE, TENN.—A new telephone company is being organized in this city in opposition to the Cumberland Co., but it is too early to say yet whether a new exchange will be established or not.

SALT LAKE CITY, UTAH.—The Big Cottonwood Power Co. has begun lighting the city under contract, using the poles, wires, and lamps of the Salt Lake and Ogden Co. which it rents. The latter company refused to lower its rates from \$10.50 to \$8.50 under a new contract, and the Council awarded the contract at the last price to the Big Cottonwood Co.

WASHINGTON, D. C.—The dome of the Capitol will be equipped with arc lights during the Congressional recess. At present the dome is lighted by gas.

NOTES.

THE Retail Clerks' National Protective Association is holding its sixth annual convention in Denver. This organization has grown very rapidly during the past year, and is in a flourishing condition.

THE Cigarmakers International Union has succeeded in unionizing the factory of S. Oettlberg & Bros., of New York, and the boycott on the cigars manufactured by this firm, has been removed.

THE National Union of the United Brewery Workmen of the United States, has adopted a new union label. The label is red with a white center on which is printed the seal of the organization.

THE Kansas City Unions are pushing the boycott against the Armour Packing Co.

PERSONAL.

BRO. J. H. Maloney, Second Grand Vice-President, resigned his position as chief lineman for the International and Great Northern Railway, which he held for a number of years, on May 1st. He went to Austin and organized a union and returned to San Antonio to change a loop for the Western Union Telegraph Co., preparatory to going to Laredo, Tex., where he will take a permanent position with this company. On June 30th, while finishing the work, he fell from a pole, breaking his left arm, dislocating his wrist, and injuring his back and will probably be laid up for ten weeks or more. His address during his enforced idleness will be 1302 West Commerce street, San Antonio, Tex. Bro. Maloney has the sympathy of all his friends, and they are legion, in his misfortune.

BRO. F. J. Roth, First Grand Vice-President, also met with a serious accident on May 7th. He has charge of the lines for the Atchison Street Railway Co., and was thrown from the repair wagon and had his ankle broken. He is still on crutches, but will soon be able to see after the lines again. When his bald head and smiling countenance appeared in the May WORKER few of our members were aware of the accident, as Bro. Roth has been located in Atchison for some time, and has thus been practically in exile, although taking as active interest in the organization as ever.



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AS THE ELECTRICAL WORKER reaches the men who do the work, and recommend or order the material, its value as an advertising medium can be readily appreciated.

St. Louis, Mo., July, 1896.

W. N. GATES, SPECIAL ADVERTISING AGENT,
29 Euclid Avenue, CLEVELAND, OHIO.



Since the hot weather set in, a great many of our Press Secretaries seem to have gone on a vacation. We hope that the new Press Secretaries just elected will not forget to send in communications each month. It is for this the Press Secretary is elected, and if he fails his Union should call him to account and elect a member who will attend to his duties. Thirteen Press Secretaries heard from in one month is a poor record.

THE Chief of Police of St. Louis has just issued his annual report, which is quite interesting. From this it appears that electrical workers are not as bad as they are usually painted to be. During the past year only three electrical workers were arrested, which is the smallest of any occupation, not even excepting the ministry. The list of arrests and occupation of the offenders is as follows: Laborers 7,043; carpenters 660; peddlers 489; bartenders 225; agents 221; bricklayers 218; saloon keepers 214; molders 200; bakers 187; printers 177; butchers 165; barbers 155; blacksmiths 114; hack drivers 113; tailors 94; iron workers 76; physicians 31; actors 17; lawyers 15; architects 11; reporters 8; editors 5; electrical workers 3.

AT the Republican Convention, all speakers referred in glowing terms to the

protection of the American laborer and stated that the protection plank in the platform was solely in his interest. How thoughtful and considerate those bankers and monopolists are during a political campaign!

During the last few days press dispatches from the East state that about 5,000,000 spindles will be stopped in the cotton mills of New England, and the cause given is the destructive competition of the cheap labor of the South. The southern mills have been built by New England manufacturers, who went to the South in order to take advantage of the cheap, unorganized labor in that section of the country. We will probably soon see the spectacle of one section of the United States demanding a protective tariff against another section.

THE Milwaukee strike still continues, and has not been declared off as erroneously stated in the press dispatches from Milwaukee, which were undoubtedly sent out by the Street Railway Co. The Unions found they could not maintain a bus system on all the streets, and as they could not be so unreasonable as to expect the people not to patronize the cars under certain conditions, the boycott was declared off, but all citizens were requested not to ride on cars unless in case of necessity. Only those who live near the extreme limits of the city and are thus forced to ride in order to get their work, have been patronizing the cars.

There have been no desertions in the ranks of the strikers, although out now for more than two months, and they are making one of the best fights ever made by organized labor against a powerful monopoly.

The Executive Board of the N. B. E. W. has given permission to No. 2 to solicit aid, under Section 19 of Article XVII, of our constitution.

THE question is frequently asked "Where do the trade unionists of America stand in regards to the silver question?" The great organizations represented in the American Federation of Labor have answered this question in positive terms at the last two conventions of that body. At the Denver convention the following resolution was adopted.

Resolved, That it is the deliberate judgment of the American Federation of Labor in delegate Convention assembled, that Congress should re-enact the law of 1837, which provided for the free and unlimited coinage of both silver and gold at the ratio of 16 to 1, thus restoring the American law of coinage as it was until 1873, when silver was demonetized without debate and without the knowledge of the American people, and that this should be done at once, without waiting for the co-operation of any other nation in the world.

The New York convention last December, reaffirmed the action of the Denver convention as follows:

Resolved, That we reaffirm the position taken by the Federation Convention held at Denver; that is, we favor the free and unlimited coinage of silver at the ratio of 16 to 1, and that a copy of the resolutions printed in the report of 1894, page 29, (given above) be forwarded to the President and the chairmen of the Committee of Finance of both Houses of Congress.

As the WORKER goes to press the Democrats are holding their quadrennial powwow in Chicago. The Republicans played their part in St. Louis last month, and the Populists will capture the city in a few weeks. The next few months will be enlivened by open air meetings, torchlight processions, and promises never to be kept.

The Republican Convention was a good example of one-man power and as far as the masses of the people or even the delegates were considered, it was not necessary to hold the convention. Mark Hanna, who has the reputation of breaking up labor organizations in his own city, was absolute dictator. His word was law without a court of appeal. It took but a few dollars to fix the colored brethren, and nearly all the northern delegates were bankers or corporation attorneys. Among them we noticed our friend, Henry C. Paine, whom we had the pleasure of meeting during the Milwaukee strike, as noted in last month's WORKER. He was very particular to tell the good people of St. Louis and the delegates to the convention, that the dear laboring people of his State were solid for gold. When the roll of States was called on the adoption of the platform, and the delegates from Missouri, Kansas and Nebraska voted for gold, they knew they did not represent their constituents who are mortgaged body and soul to eastern capitalists on account of the demonetization of silver, but Mark Hanna told them how to vote, and they had to obey their master. McKinley did not seem to be in it at all, and if we should judge from the manipulations at the convention, if elected, he will be a putty man in the hands of Marcus Aurelius Hanna.

It was a scene never to be forgotten when Senator Teller arose and severed his connections from a party he had been identified with for forty years. "I cannot before my country and my God agree to that provision that shall put upon this country a gold standard, and I will not." As the Senator uttered these words, the gold bugs on the floor of the convention sat as cold as marble statues, but the people as represented in the crowded galleries were with him, and almost raised the roof with their cheering.

History is being made now in Chicago and the cry is "No compromise with Wall Street;" "Christ drove from the temple better men than those who for twenty years have shaped the financial policy of this country."

After the curtain drops in Chicago, all eyes will again be turned to St. Louis, when the representatives of the people will hold their convention. Will they be equal to the occasion?

When the smoke of the convention battles is cleared away, the people will have several months for thoughtful study. Will they bring the enthusiasm they have manifested for the last few months to the polls and forever overthrow the power of the Rothschilds, Morgans and other pawn brokers who have impoverished our country and brought untold suffering to the most favored portion of God's creation?

In a recent article in the *Arena*, on the telegraph monopoly, Prof. Frank Parsons states a few facts, which could be studied to advantage by those who advocate government ownership of the telegraph.

(1) There has been a constant depression in the standard of wages, coupled with harder work, in time or intensity, greater responsibility, etc.

(2) A total disregard for the natural rights of workers forming into organizations to check the abuses and injustice that the powerful are apt to inflict upon the weak; a disregard which the corporation has been able to enforce through the black list, by which men once discharged can find no similar occupation anywhere.

(3) The bulk of the workers under this corporation are constantly being replaced by a younger set of the rising generation, because as beginners and yet unmarried, they can work cheaper than their older, skillful and married brethren.

The truths of these facts have been proven by Congressional committees, and there can be no doubt about the professor's data. These facts are made more revolting by contrast with what takes place in England, France and Germany with the same class of workers in the telegraph system there. Such workers in these countries enjoy better pay and better treatment than they do in this country. They rise in proportion to merit and are assured of holding their situations as long as they don't prove unfaithful to their duties, and they are never overworked as they are among us, while merit here is utterly disregarded.

The Labor Standard, published at Paterson, N. J., which for twenty years has battled for the rights of labor, has decided to issue a national monthly edition.

The Brotherhood of Boiler Makers and Iron Ship Builders of America at its recent convention, decided to affiliate with the American Federation of Labor. It is probable that several other large organizations will decide to affiliate with the A. F. of L. at their coming conventions.

Subscribe for the WORKER.
Subscribe now!

FROM OUR UNIONS.

ST. LOUIS, MO.

Editor Electrical Worker:

You may think Local No. 1 has been numbered among the has-beens; such is not the case. Since our city was visited by the terrible tornado No. 1 has been booming and giving evidence of the truthfulness of the old adage, "It is really an ill wind that blows no one good."

There is a tendency to throw all the work on the willing worker. If everyone will assume a position, things will be much better and easier. The semi-annual election was entertaining in the extreme. The boys are fast learning parliamentary rules and the discussions would gladden the heart of the Grand Old Man, were he here to listen. There seems to be more good feeling existing now than we have had for some time. The result of the election manifests a more general brotherly feeling. Bro. Frank P. Kinsley was elected President, but not without a struggle. Bro. Chas. Demar, our retiring President, had a number of friends who wished to see him remain, but he did not want it. Although Bro. Demar was absent frequently, he did his duty with unflinching precision, and deserves the thanks of the Local. As for the Vice-President elect, there is but little to say. His name is common among linemen the world over, and he is known to be a Union man to the core. When you mention the name of Sim Chester you speak of a first-class good fellow, and our new Vice-President. Baldy Bill Peebles still holds the books of records, and signs himself Recording Secretary, Press Secretary and delegate to the Trades and Labor Union. Our Financial Secretary has retained his place, and did it by the unanimous vote of the Union, so he must be a pretty good fellow, which he is; both pretty and good, and young ladies looking for such a darling should see John P. Casey, Financial Secretary, Local Union No. 1.

Our pretty blue-eyed blonde and jolly good brother, James Gallagher, holds the office of Inspector, which is an assurance of having none at the meetings but those entitled to be there.

Old, sturdy, tried and true Bro. Wes Thomas is Foreman for the ensuing term, and you can bet with safety that Tuesday evening at 8 o'clock you will find him at the hall, southeast corner Twenty-first and Franklin avenue.

Bro. Ed Beck was elected one of the three trustees, and in company with Wes Thomas and Harry Myers, will keep the accounts of the Union straight.

Bros. Kinsley and Chester were chosen delegates to the Building Trades Council. They have been there before, so there is but little to say of them in that capacity.

Bros. Peebles and Carville were chosen delegates to the Trades and Labor Union, and you can rest assured the Little Giant

will be heard from. Bro. Carville is small of stature, but his heart is in the right place and he has brains enough to prevent any one getting much the best of him. Just keep your peepers on him and you won't think you have lost anything for your pains.

I hope the new officers will keep up the good work of the past, and by the end of their term have the Union on a paying basis. Things must be made interesting in order to secure attendance and the more that attend the less disgruntled members there will be. Keep up the good work and every one will bless you. When you have made a success every one is willing to help you. Now is your time to get your work in.

The rush is over to a certain extent, and the companies are holding only the best men. Get them into the Union, and we can then look forward to the betterment of our craftsmen in the near future.

Bro. J. P. Jones, Press Secretary of No. 27 is with us, doing work in our city for a firm in Baltimore. Bro. Jones is a first-class Union man and generally good fellow.

Ex-brother Willis Johnson died July 7th about 10:15 A. M. He had been ailing for some time and rather unfortunately allowed himself to fall in arrears. His death was not entirely unexpected, but nevertheless it is keenly felt by all who knew him and his family have the heartfelt sympathy of Local Union No. 1 in their bereavement.

With many thanks for favors extended, both to the Union and myself, I am,

PRESS SECRETARY LOCAL UNION NO. 1.

ST. LOUIS, MO.—On June 25th St. Louis was formally connected by long distance telephone with the east. The long distance lines have extended west as far as Terre Haute for several years, the connection to St. Louis was made just before the meeting of the Republican convention, a temporary office being opened for that occasion.

NEW YORK.

Representatives of the various unions connected with the building trades in New York City, which for one reason or another have separated themselves from the present Board of Walking Delegates, have organized a board of their own to be known as the Building Trades Council. At present the organization includes the District Council of the United Brotherhood of Carpenters and Joiners, with twenty-one unions; the Amalgamated Society of Plumbers and Gas Fitters, with about 2,000 members; the Executive Board of New York Painters, with four unions; and Local Union No. 5 of the National Brotherhood of Electrical Workers. The Council will be composed of three delegates from each trade, Daniel Featherstone of the United Brotherhood of Carpenters and Joiners being the chairman. One of the fundamental principles of the Council is that no general strike in the building trade

shall be ordered until each of the unions involved shall have first voted in favor of such a strike. The action of the plumbers in joining the new movement has been the cause of considerable friction in the C. L. U. with which the plumbers are affiliated.—*Plumbers Journal.*

SAN FRANCISCO, CAL.

Editor Electrical Worker:

Well, here we are again with nothing to say and a long time to say it in. There is not much electrical news just now, but all members are at work and the prospects are good for a prosperous season with us.

The battleship Oregon has had her trial trip and has proved to the world that the Pacific coast can produce ships as well as fruit and flowers; also men to man them when needed. But what makes the N. B. E. W. proud is the grand success of her lighting plant, which was installed principally by Brotherhood men, members of No. 6.

Our second annual picnic was a success beyond all expectations. Socially it was a hummer; financially a howler, and placed a good round sum to our credit. The entire committee deserves the highest commendation for their untiring energy. The championship medal was a thing of beauty. It was made up of a \$10.00 gold piece with an emblem of the order and a diamond in the center, suspended from two bars bearing the inscription "Champion of the Pacific Coast, presented by members of No. 6, N. B. E. W." The following from a local paper tells the story:

The members of Local Union No. 6, National Brotherhood of Electrical Workers of America, enjoyed, with their wives, sweethearts and friends, their second annual picnic at Schuetzen Park, San Rafael, yesterday.

The first train, which arrived early in the afternoon, consisted of thirty-five cars, containing a majority of the members of the Local Union and a gratifying number of their fellow workers in electrical lines.

The contests and games were commenced about 2:30 o'clock and occupied nearly all of the afternoon. Among the races were those for fat men, fat women, N. B. E. W. members, N. B. E. W. members' wives, married women, single women, girls and bicycles. The pole-climbing contest consisted of ascending with ordinary climbers a forty-five-foot pole. J. A. Cameron, who is noted as an athlete besides being a very effective lineman, won the first prize in exactly 16 seconds, thus winning the Pacific Coast championship.

Another contest required the throwing of a light line over a high wire, as is done by linemen in stringing wires. The length of rope lying on the ground after passing over the wire is measured. This contest was won by W. Bentley.

Another interesting contest consisted in climbing up a thirty-foot pole, down that and up a similar pole thirty feet distant, down again and up and down the first pole. This created much amusement. The winner was J. J. Cameron. Time, 0:30 1-5.

The concluding contest in practical electrical work was the cross-arming contest, in which a number of linemen participated. Each contestant climbed a pole with his tools on his back, sawed a notch, hoisted up an eight-foot cross-arm and secured it with two lagbolts, for which he had to bore holes. One lineman carried his

crossarm up with him tied to his back. The contest was won by A. Wagner in 2:27.

One hundred and ten articles were distributed as gate prizes.

The committees and managers wore ornate badges, some carrying miniature electric lamps.

The result of the games was as follows:

Baseball game, four innings—American District Messengers beat the San Francisco District Messengers. Score, 8 to 3.

Pole climbing contest for championship of Pacific Coast—First prize, won by J. A. Cameron in 16 seconds; second prize, J. J. Cameron, 16 3-5 seconds; third prize, George Frost, 16 4-5 seconds.

Sixteen-pound shot put—First prize, J. A. Cameron; second prize, H. McDonald.

Crossarm contest—First prize, A. Wagner, 2:27; second prize, F. Christ, 3:03 2-5; third prize, G. Frost, 4:58 3-5.

Hand-line throwing contest—First prize, won by W. Bentley, rope on ground three feet; second prize, Jack Cameron, 2 feet 10 inches.

Twelve-pound hammer throw—First prize, J. A. Cameron; second prize, H. McDonald.

Country climbing contest—First prize, J. J. Cameron, 0:30 1-5; second prize, J. A. Cameron, 0:33 2-5; third prize, George Frost, 0:34 3-5.

Tug-of-war, telephone men vs. electric light men—Won by the electric light men.

We had a rousing meeting Wednesday night. Received several applications and nominated officers for the next term. It was pretty lively, and we have a long list of candidates up. The convention in St. Louis will not shine with us.

A committee was appointed to secure grounds for our next picnic; also a committee was appointed to arrange for a grand election ball, to take place about election time.

There were several prizes uncalled for, among them a bottle of hair restorer. On motion of Bro. Rush, it was donated to Bro. J. A. Fulton. He has been married about seven years, but there are others.

Well, brothers, this is the last you will hear from me as press scribe, as I am anchored in the western addition where I do not run up against anything but hills, and it is uphill both ways, so I will give way to some more capable brother. Now, if there are any bouquets due me for services rendered while on the staff, they will be received at the box office.

Well, my line is open.

C. E. MASTEN, *Press Secretary.*

TOLEDO, O.

Editor Electrical Worker:

As I have been in St. Louis the last three weeks taking in the ruins of the cyclone, my stock of news for this month's letter will run short, but I want to make a little showing to let the boys know that No. 8 is still in a flourishing condition. We are adding new lights to our circuit right along. A week ago we held an open meeting. A large number of the boys were up. A few applications were made, refreshments were served and the boys all enjoyed themselves in grand style.

Work here has struck a steady gait and will probably keep it up for some time. None of the companies are paying less than \$2.25 a day now.

Perhaps some other Local has a big letter for this month, so I will cut out.

J. F. VODERMARK, *Press Sec'y.*

CHICAGO, ILL.

Editor Electrical Worker:

All members of labor unions should post themselves this year on the coming campaign. As labor is all that holds up nations they should concentrate their forces and work for such men and measures as will do them the most good. It is very plain to be seen now that there are no Republican and Democratic parties only in name. This year it is simply a fight to see if Lombard and Wall streets can maintain the single gold standard, on the one side, and the free coinage of silver and all the toiling masses on the other. If the laboring people lose this fight in November by letting the aristocrats rule them through the Republican gold standard party, they should be disfranchised and prevented from voting again. The gold standard party will send out its speakers in the near future to tell us how prosperous we have been and are now, whereas if it were not for the labor unions we would probably not be getting \$1.50 per day.

The trouble unquestionably is on account of our finance, as there is no nation on earth that has as industrious a people as America and especially the United States with only a population of 21 to the square mile, where Great Britain has 311, Germany 234, France 187. If this country was as densely populated as those mentioned and had these same laws, what would we do? We would be classed as cannibals. In order to make the people of this nation patriotic, it is necessary to make it possible for them to be prosperous and see their way clear.

There can be no patriotism with these people as long as our Federal authorities are allowed to send soldiers and shoot them down when they are trying to better their conditions. Such has been the case, and now when election comes around these very men will ask you to cast your vote for them or some of their clique. Will you do it? They will also tell you the finance question has nothing to do with the panic; it is the tariff. Will someone be kind enough to show me where the tariff, high or low, benefits a lineman or an inside man, or any electrical worker? Show me a man protection protects and I will show you hundreds who work for that man, who have no more protection than a rabbit. They have palmed this tariff off too long. The people are on to them and if the lines keep coming as they have been coming of late, we will sweep this gold bug element off the face of the earth in November.

Labor must fight for its rights or they will make peons of all of us. Vote a straight free silver ticket and the people will call you "Mister" in a year or two.

C. D. HARR.

DYERSBURG, TENN.

Editor Electrical Worker:

It is with great pleasure I inform all that we are busy, having closed the circuit on two good contracts and are in a good way to close two more in the near future. Work here in Dyersburg has been scarce but we are giving the citizens a class of work that "catches," and they are studying whether to let us wire their residences or change some work they have in their stores. We are on the W. H. Tucker Block and will finish up in the course of a week, and when completed, it will be the criterion of the place as a cabinet cut-out installation. The building is wired with Grimshaw R. C. wire, my brother and I doing all the work alone. There are no Union men to look for here, but in the event we have to have help I can assure you the boys who have the Union brand on their backs would get the big persimmon.

I have just received a communication from E. Lewis Evans telling all the trouble the tobacco unions are having with the trust. That is the way to make them hit the center. I have taken the yellow dodgers or stickers and stuck them up on the new building where they could best be seen. They were noticed by a great number who passed by. I tell you, brothers, we all must pull the same way or we will get stuck sure.

Now, what I want to talk on mostly is the subject of electrical manufacturing companies. Do they all employ Union men? And how about the porcelain factories? Are they in line? If any brother knows of one that is not, please let it be known. I think we can put it on the extra list by not buying goods from that company. It is an easy matter to get at them all if the Union men will take the time to just find out for themselves about this business.

I will say a few words of No. 14, Memphis, Tenn. There are all kinds of grounds there. There was a heavy ground on the Treasurer when that circuit was run. We could get a gingle from both sides of him. Now they say that the circuit is free from all gingles. There is some good material in the city, but Union men had better stay clear, as Memphis is the Mecca for scabs.

One scab came to Dyersburg to figure against us. He got the job, did a bum job, lost money, tried to sell parties \$1.50 worth of P. brass casing for \$14.50, got it where the chicken got the axe, just where he ought to have got it before he came here. These are the kind of guys we have to contend with. This mark belongs to one of Memphis' scab plumbing firms.

I suppose St. Louis is chuck full of good Union boys working on the line and doing inside work. Wish them all the success they can get, for I know what it is to be idle. There is no money in it.

What pleased me most and made me delighted was the way the boys of No. 45 made the guys come in at Buffalo when those buildings were going up there. I

can just imagine the time the boys at St. Louis will have hunting up and converting those who came to St. Louis since the big blow struck that city.

Well, as I am getting too much heat generated in my fields and am afraid of burning out one of the coils and having no material to rewind with, I think it will be good policy to open the circuit and let her cool down for awhile. Coal is high and sawdust cheap. That's what makes one so hot to keep up steam in this climate.

CHAS. E. BLAKE.

TACONY, PA.

Editor Electrical Worker:

This being a rainy day, and consequently a day off, and as linemen as a general rule, and especially in the summer time, are a bit lazy in regards to writing, I therefore deem it my duty to write these few lines to the WORKER and let the boys know where we are, who we are, and last but not least, what we are doing. We are working at the present time, and in fact have been for the past few months for the Holmsburg, Tacony & Frankford Electric R. R. Co., which is extending its lines and also increasing the amount of the feed wire capacity.

Tacony is a suburban village of the Quaker City, and is well known throughout the United States on account of the Henry Diston's celebrated saw works which are located here, employing several thousand people in the different departments. The town itself is picturesque and quaint and is located on the bank of the beautiful Delaware River, not many miles from the spot where the father of our great and glorious country crossed this historic stream.

Who are we? We are a jolly lot of good fellows, and as I do not wish to keep the readers of the WORKER guessing very long, I will disclose their names to you at once, and you may safely bet on it that they are all O. K.

The first I will mention is our genial line foreman, who also handles the dough for Local No. 15, Harry C. Rawlings. Harry has troubles of his own just now, having his wife and little baby boy ill at home. We most sincerely wish them a speedy recovery, which will bring forth the smiles upon Harry's countenance again.

Bro. Wm. McFadden, who is better known under the alias, Little Willie McFadden, although he is rather large for a little Willie, according to my estimation. Little Willie runs the emergency wagon, and you may bet he can run it, especially when our gray team of horses is hitched to the wagon, and Jim Marley, of Pepper and Register fame, is doing the driving. Why, we beat anything in running, from the fire department down to our yellow dog, and he is a runner. Bro. Mc. is looking rather handsome of late, since he has joined a certain tribe known better under the name Prohibitionists; his strongest

drink just now is iced tea. Little Willie told me the other day—confidentially of course—that he seriously thinks of deserting the ranks of old Bachelor St. Paul and join St. Benedict's forces, but this brings to my memory an old quotation, trite but true. "He either fears his fate too much, or his deserts are small, who fears to put it to the touch and win or lose it all." And I think Bro. Mc. fears his fate too much, as to my knowledge he has not as yet proposed to the little black curly-headed girl across the street, with whom he spends all his leisure hours; but nevertheless we wish him success and good luck, and I suppose his many friends will do the same.

McFadden's partner on the emergency wagon is rather well known, and those who are not personally acquainted with him have certainly heard his name mentioned more or less both in the Eastern and Western States. This man is our only William David Smith, better known as "Smithy, the Push," President of Local No. 15, and there is no need of putting O. K. to his name. Everyone who knows him knows him as a loyal and true Union man. All brothers who are personally acquainted with "Smithy, the Push," are kindly invited to sympathize with him just now. Poor Smithy is sick, very sick, and his illness is one which puzzles all the physicians in the Quaker City. They have no remedy to give him. His case is a hopeless one, and as one medicine man put it, "there is no cure for him any more." Smithy is lovesick. Everyone who will read those lines must agree with me on this point, that when an old-time roadman dreams with open eyes in broad day time and solders a feeder ear to a cable span wire instead of a feeder tap, or forgets the endless sling and leaves it hang all night on top of the pole, and then raises old Cain with a poor, unfortunate "ground-hog" the next day for losing said sling—this man must surely be lovesick. I do not wish to be inquisitive or familiar, but I would be very happy if Bro. Smith would inform us where he puts all those great big bouquets he has been taking to the city every night for the last two weeks?

Jovial Jack Fagan, of St. Louis, Mo., and his partner, good natured Paddy Lee, from Columbus, O., have been working with us for the past two weeks, and I can endorse them as the right people in the right place. They are O. K. from toe to head, and you ought to see them play ball. If Chris Von der Ahe could have seen them as I did, he would surely try to buy them of Captain Rawlings at once, but we won't sell them as we do not wish to lose them.

Bro. Thomas Skully, a bright shining light from Local No. 15 is beyond doubt well known to many readers of the ELECTRICAL WORKER, and is a staunch Union man. He don't play ball just now owing to a game leg which he contracted while

working in Brooklyn, E. D., but he will join the nine just as soon as he is able to.

Bro. Charley Lang, also of No. 15, and of Western Union fame, is very quiet of late, and seems to have lost all his spirits and good humor. Perhaps he will explain to us the reason for his sudden quietness later on.

We are doing nobly, both in regards to work and pastime pleasures. We have up to date played three games of base ball and always came out ahead, although the last game we played was against the crack team of Tacony, the score being 19 to 18 in favor of the linemen. The following is the score of the games played:

1. Motormen, 11; Linemen, 21.
2. Gally Goose Club, 15; Linemen, 23.
3. Dirty Fats Club, 18; Linemen, 19.

This score goes to prove that we are able to play both high and low balls.

Greetings to Charley Hatt, of No. 9, Chicago; keep it up; you are on the right path; the People's Party is the only party. In a few years it will rank among the foremost.

To Henry Hatt, formerly of Local No. 15, I send greetings from your old friend "Dutch" and he would be pleased to hear from you. McFadden would like to hear from his old friend, Henry Miller. "Henry where art thou?"

AN UP AND DOWN MAN.

DETROIT, MICH.

Editor Electrical Worker:

No. 17 has little real news this month, which shows there is no trouble here now, for, as Bro. Bull of No. 5 says, "No news usually means good news" in a trade journal.

The following officers were elected for the ensuing term: T. Forbes, President; W. C. Shuart, Vice-Pres.; Frank Campbell, Rec. Sec'y; J. G. Forbes, Fin. Sec'y; M. Couine, Insp.; G. H. Beamer, For.; D. E. Ellsworth, Press Sec'y.

Mr. Alex Dow, City Electrician, has resigned and has accepted a position with the Edison people of this city. He was well liked by all the employes, who presented him with a magnificent gold watch on his retirement.

The boycott on the Detroit baseball team of the Western League has been declared off, as the scab cigar signs have been taken off the fence and Union ones put up instead.

Bro. Mike Mahoney, who was injured while working for the Electric Rapid Transit Co., is all right again. He is a lucky man and is a firm believer in the old saying that "God loves the Irish."

Electrical work is somewhat slack at present, but I am happy to say that all of our Union men are working.

Our worthy brother Chas. Lapworth is practising every night on his high gear bicycle and challenges any man in the Brotherhood for a one-mile or five-mile go, barring none. He swears by the great horn-spoon that he will get first prize on

Labor Day (open to Union men only), or will be carried off the field.

No. 17 is not growing very fast, but she is holding her own nobly in spite of the obstacles that have been in her way, and they have been many. In time of war with a foreign foe a man is heralded as a hero who plants himself in front of the enemy's guns and beckons his followers on to victory. Some of the brave men fall. I claim that as brave men as ever faced a rampart are those good loyal Union men who are striving among the great mass of working men to uplift their fellows; they may sometimes fall, but the seed they are planting will some day spring forth. Then will the great public have its eyes opened and have stronger and better ideas of the rights of man. Let us keep striving, brother electrical workers, with hearts of oak.

DANIEL E. ELLSWORTH, *Press Sec'y.*

WASHINGTON, D. C.

Editor Electrical Worker:

As a member of Local No. 26 who takes a great deal of interest in the affairs of the Brotherhood through the columns of our official journal, and looks forward for the WORKER to come to hand to read the correspondence of our Press Secretaries, I have noticed in the late issues that Local No. 26 (an energetic body) was not heard from. It cannot be from lack of news, as we have plenty of the every-day happenings that our worthy brothers could read with interest, both electrical and otherwise. It is rumored in No. 26 that our worthy Press Secretary is more interested in his farm and appurtenances than he is to promulgate the general information that can be gathered under the shades of the Capitol for the benefit of the journal and members.

The writer, knowing that he is of an experimental turn of mind (as we all should be in this, our profession), has come to the conclusion that he has buried himself in the suburbs (like our great Edison), experimenting with some electrical contrivance to grow and mature better the products of his farm, beets, potatoes and other products of mother earth. He has a wide field open for him—a very wide field—and the writer hopes he will be successful and give his researches to mankind. This will be a boon for the "poor Western farmer." As election has taken place I know his successor will give more time and space to the brothers than he has. I will say no more. I was in the race myself for Press Secretary, but was snowed under, same as Boss Reed at St. Louis.

I noticed in the journal that Local No. 6 of San Francisco asks for information in regards to opening headquarters. The writer having worked for some time in Frisco himself, naturally takes an interest in it and will give them all the information obtainable at present. Local No. 26 opened an electrical headquarters in the business section of the city. We have it fitted up in a luxurious style, consisting of

smoking-room, library and reading-room, and hall. In the smoking-room we carry a line of Union cigars, which is well patronized by the members of the Union and other bodies. Committees from the Building Trades Council and Central Labor Union rendezvous there to discuss matters, and consequently patronize the cigar stand. The library and reading-room has a commodious book-case which was built by members of the Union under the direction of Bro. Miller. It is well fitted up with electrical and scientific reference books, contributed by members, especially by Bro. M. O. Spring, and other friends of the Union. There are rules and regulations governing the same. All the electrical journals and current literature is subscribed for by the Union which the members make good use of. In rear of library is the hall which is used for the business of the Union Friday nights. Other nights it is rented to the following: Monday and Wednesday evenings to the Washington Electric Club, an incorporated body composed of some of the best electrical people in the city (I transmit a copy of Article 2 of the constitution, which may be of benefit to some other Locals). Tuesday nights, Building Trades Council. Thursday nights, Engineers' Union, 6678, A. F. of L. Friday nights, Local No. 26, N. B. E. W. Saturday night is used as a general reunion and smoker. The rooms are heated throughout by steam in winter and have electric lights and fans, which were kindly donated by the electrical contractors of Washington, and other modern conveniences.

Hoping to hear from the newly elected Press Secretary in the next issue, I will now close.

JOSN H. LLOYD.

THE WASHINGTON ELECTRIC CLUB.

OUR OBJECTS.

Article 2 of the Constitution.

SECTION 1. The object of this organization is for the instruction and advancement of its members in the study of electricity and other applied sciences.

SEC. 2. The conducting of experiments and practical demonstration of the same.

SEC. 3. For the establishing and maintaining of a reading-room and scientific library.

SEC. 4. To invite, solicit and procure, from time to time, the aid of the best scientists to instruct by lectures and demonstrate by practical illustrations the deeper scientific problems.

SEC. 5 (*Instructions*). In conjunction with general instruction and demonstrations special classes shall be formed for individual instruction in the different branches of mathematics, experimental electricity, applied mechanics, etc.

There was a very pleasant social gathering of the Washington Electric Club last evening at their rooms, 508 Eleventh street northwest.

There was a large attendance of members and many invited friends. As a prelude to the entertainment Mr. C. Moore, the club librarian, made an interesting address relative to the organization of the club from its inception to the present.

The programme and those who took part in it were as follows: Music, by a quartette composed of Messrs. H. F. Galleher, B. F. Judson, A. V. Holmes and A. E. Yundt; graphophone selections, Mr. M. O. Spring; banjo selections, Messrs. Aaron

Stern and John Rosser; humorous recitations and witty sayings, Mr. David C. Bangs. At the close of the entertainment a smoker was given.

The club is largely composed of the membership of Local Union 26, National Brotherhood of Electrical Workers, and is maintained as an educational auxiliary to the association.—Exchange.

SACRAMENTO, CAL.

Editor Electrical Worker:

As No. 36 has been organized six weeks, and I have been burnt up by the boys worse than if I had been on a short circuit, I will try to fill the office to which I have been appointed, and trust that you will excuse sparking of brushes or jumping of lights, as this is my first experience in this line.

We have secured a permanent hall in the Forrester's Building, and are comfortably quartered. We are continually taking in new members, and have a very bright outlook for the future. The present officers of No. 36 are making a special effort to make a success of this Local (excepting the writer, of course).

The great transmission plant from Folsom is at the present time working a large force of men putting in residence lighting, and the Sunset is doing a good deal of country work. Another big plant to make its appearance in Sacramento is the Yuba Ditch Co., with a transmission line of thirty-two miles.

I am sorry to say that the members of No. 36 were unable to attend the picnic of No. 6. I understand from the "notorious black man" that it was a grand success.

The Long-Distance girl has thrown the switch on to the harmonic system, so I close. R. MONTGOMERY, *Press Sec'y.*

ST. JOSEPH, MO.

Editor Electrical Worker:

As this is my first attempt as Press Secretary, I hardly know what to say. I will commence by saying that that No. 40 is right up to date and all of the brothers have steady employment except one or two.

Bro. Snodgrass has started in business as the Enterprise Electric Co. and is doing a first-class motor business, and with the aid of No. 40 bids fair to continue so.

If a certain electrical company in this city would employ Union men their work would bear inspection and business would not be so dull for them. We are in hopes they may realize this in the near future. Bro. Sullivan is on the road selling their electric clocks and is meeting with good success.

Bro. Snowden is selling quite a number of his safety arc-light hangers.

The Board of Aldermen are contemplating an addition to the city electric light plant of one sixty-light dynamo and one new circuit.

No. 40 would like to know the whereabouts of ex-brother James Durkin.

W. E. GORTON, *Press Secretary.*

ROCHESTER, N. Y.

Editor Electrical Worker:

Bro. Chas. Hillard was killed on Sunday morning, June 21st, while at work around the switch-board of the Citizens' Light & Power Co. at the plant, foot of Factory street. Some men who were standing near him saw him fall and rushed to where he lay on the floor. All of the methods of resuscitation which electrical workers are instructed to employ in cases where a person receives a severe shock, were tried without avail. Bro. Hillard never recovered consciousness after he fell.

No one saw him come in contact with any of the electric wires, and at first the officers of the company stated he died of heart disease. At the coroner's inquest, however, the jury brought in a verdict of death caused by an electric shock and exonerated the company from all blame. Near where Bro. Hillard was working there were several wires carrying 2,200 volts alternating current, but there was not a mark on the body that would in any probability have been caused by an electric current, and yet in some manner he must have received the full force of the 2,200 volts. Bro. Hillard had been in the employ of the company for about one and one-half year and came here from Toronto, Canada, where his family still resides.

K.

BUFFALO, N. Y.

Editor Electrical Worker:

I suppose No. 45's letter was not missed in last issue, but it would have been there had there been any material to make one. We are all at work, that is, the outside men; but the inside workers are not as fortunate, as most of the new buildings have been completed and those in process of erection are not far enough along to allow the boys to work on them.

The Western Union Tel. Co. has started its usual gangs on general repairs, and the Postal has just completed three new wires to Rochester and one to Chicago. Bro. Louis Bangert will now start with his gang to rebuild the lines north from Syracuse. The Postal is also making arrangements to run two new wires from Geneva to Elmira, taking in Penn Yan and Watkins Glen. This will keep the outside men at work until late in the fall.

Our semi-annual election came off at our last meeting. Good and responsible men were elected to succeed those who had honorably and faithfully discharged their duties during the past term. We had a call from Bros. Dudley and Curtis of No. 10, Indianapolis, both looking for work. As Bro. Dudley was an all-round man, he secured employment at once. Bro. Curtis was taken sick and was unable to work and spent two weeks in idleness. Had it not been for the boys of No. 45, who procured him the best of medical attendance and other comforts, I am afraid we would have had to ship him home in a box. He is now with friends in Cleveland and we

hope to soon hear that he has resumed work. We trust he will not forget us.

The Niagara Falls power is still twenty-five miles from Buffalo, and as there is no activity on the part of the power company, it would seem they intend keeping it there for the present.

The Western Union and the Postal were kept jumping to care for the large number of circuits which were in operation during the session of the Republican Convention in St. Louis. They expect to have a roast when the Chicago Convention opens.

Having nothing further, I hang up my receiver and ring off.

W. H. KELLY, *Press Sec'y.*

San Antonio Notes.

C. M. Potter, lately returned from the City of Mexico, handed me the following, which should be a warning to electrical workers having an idea of going to that place:

"The largest American electrical companies in the city of Mexico are the Edison, Westinghouse, and Western. There are private telephone plants, as the Rollings, Washburn and Moen, and the Mexican Telephone Co., owned by New York men.

"In the machinery line, American companies all the way from San Francisco to New York are represented in the city.

"There are American jewelry stores, tailor shops, grocery stores, a transfer line, eight bicycle agencies, private bath-rooms and any number of saloons. A fine race track, illuminated by electric lights, and where racing is done nightly during the season, is one of the modern attractions.

"Regular telephone men receive \$35 to \$50 a month, extra men \$1.00 a day, and ground men 50 cents a day. These are the ruling wages. As there are no Mexican labor organizations, this is not surprising.

"All American companies are installing contract lights with Mexican linemen at wages mentioned above. A few short lines of electric road are being built in various parts of the country, but none are said to be in operation.

"The wages of the best building tradesmen are about the same as those paid to linemen. Most of the mechanics wear sandals, while not a few go barefooted. American board can be had for \$30.00 to \$45.00 a month. Receipts given in business transactions have Government stamps affixed. This is another plan of taxation designed by the Government to meet expenses.

"The upper classes impress one as being deeply religious, while the lower classes appear to be considerably mixed with expert petty thieves and chronic drunks."

The Electrical Workers will play any man's base ball club made up of union men. Ellis, our catcher, makes a "crack" that he does not even except the professionals.

Ernest Kuhlman has returned from St. Louis. He did not stay long. The wages were too small and the business overcrowded. When Nat Neeley found him at the light station he bent over him very tenderly and said "Ma." Ernest will not admit that he got homesick, but that's the way "Big Nat" says it was.

The telephone men are busy setting poles on various streets, and in this way a fair-sized gang of our members pass the warm days.

The boys extend thanks to Louis Hall for his hearty coöperation in making the picnic a success, for without his efforts the affair would have been a very small one.

That "gold watch" won by Joe Wellage in the pole-climbing contest at the late picnic of the Electrical Workers, is a daisy and is very much prized by him.

Geo. Sullivan, our mascot, has gone to St. Paul, Minn., to confer with the general superintendent of construction of the telephone company about matters telephonic in Southwest Texas. He was in a joyful mood when he left.

Two initiations for last Saturday night, J. McElroy, who succeeded John Maloney as lineman on the I. & G. N. Railroad, and C. West, telephone man.

SAN ANTONIO WEEKLY DISPATCH.

HOUSTON, TEX.

Editor Electrical Worker:

I will throw my switch and close the circuit for the first time. I am a new hand at this, boys, so do not blame me if I do not make all my lights burn the first time I close the circuit. However, I will try my best to please the boys of No. 66. They told me when I was elected to fill the office of Press Secretary that if they did not find something in every WORKER from Houston that I would turn up missing some day soon. As I value my life very highly I will do my best to keep my lights burning brightly so they can see that No. 66 is not forgotten by me.

Well, work is not as good here as it was a month ago and there are two or three members walking the streets of Houston, I being one, having been laid off on the 29th of June, but it will only be a few days before I will be at work for another company—that is, if promises go for anything. I would advise anyone looking for a job to stay as far away from Houston as possible, although we will be glad to see any of the boys when they come this way with clear cards. We have changed our meeting nights to every Monday night now, and when a member fails to show up he must dig up something, so we have a good house every time.

We have lost two brothers via traveling cards, Bros. Flynn and Reed having gone to our sister Union No. 71, of Galveston, but I am sure No. 71 can take care of them.

We had election of officers on the 22nd of June and re-elected the following: J. W. Howard, President; F. A. Peters, Financial Secretary; S. T. Sikes, Recording Secretary. We could not find better men to fill these offices, and every one seemed to want them back for another term. There being no opposition they were elected unanimously.

I visited Galveston a few weeks ago and wish to thank the boys for the way I was treated by them, for I am sure no one could have treated me more like a brother than they did. I cannot praise the Galveston

boys too much, especially their worthy President, Bro. Lorenzo, for if there is a Union man in the State of Texas he is that man.

On June 29th, about 2:30 p.m., the boiler in the newspaper office of the *Houston Age*, an evening paper of this city, blew to pieces, killing three people and wounding several more. The dead are Henry Lyons, pressman; Miss Mattie Loeb, typewriter; Walter B. Emory, telegraph operator. The two latter were employees of the Southern Pacific Railroad Co. and were in the office about 1,000 feet from the explosion.

Well, I guess I will pull my switch and open my circuit for this time, as I have discovered my wire is too small to carry the number of lights I have burning. I will try to have in a larger wire by the next time I attempt to close this circuit, so I can give more light for the boys.

GEO. D. CROSSLEY, *Press Secretary.*

QUINCY, ILL.

Editor Electrical Worker:

As this is the first letter after election night, and I have been changed from a "high private" in the rear ranks to the very honorable position of Press Secretary, you will excuse a short and poorly written letter. We are the same old lights, only working on different circuits from what we were. As last meeting night was election night, we had considerable business on hand. We elected Bro. D. M. Mallinson President again, and Bro. Wm. Wagner, Financial Secretary, and made a few other changes which I will report in full next time.

The telephone boys nearly all left about two weeks ago, and our hall seems to be thinly settled now. We are very sorry to lose the telephone boys, but of course the best of friends must part. We can say that the Union that chances to get them will find them all right, jolly and always ready to do their part. Good luck to the Local Union that gets them.

Our boys are nearly all busy at present, but are amply able to do all the work there is, and could do more.

Bro. Wm. Hickman has been having quite a time at his house. His wife has been seriously sick for a long time, but we are glad to say is improving now.

Brothers, don't expect too much from me this time, for you know when you install a new light it don't always work just right for the first time. By next month I will try to say more about the newly installed officers and our friends, the telephone boys, and possibly I can do better after I am properly "adjusted." And now for fear of consuming more than 20,000 watts, my rated capacity, I will open the circuit, wishing every brother a glorious Fourth. "Vive, vale."

C. H. McNEMEE, *Press Secretary.*

SCHENECTADY, N. Y.

Editor Electrical Worker:

In my previous contribution I spoke of the slow growth of No. 70 and the dullness of business at the General Electric, and was in hopes that when I wrote my July letter I might speak more encouragingly regarding both, but I regret to say that I cannot. Of course at this season of the year we do not look for much of an increase in our membership, as many of our boys are out of town rustinating, and, as a matter of course, are not devoting any of their time to business; besides this, not a few of our members have recently entered into the bonds of matrimony, and certainly from them we cannot expect much work, as we doubt the remainder of the summer will find them devoting their time and attention to the welfare of another and more important Union. We trust, however, that after they return from the wedding tours and regain their equilibrium, they will not forget that No. 70 will require a little of their time and money.

Our picnic, which I spoke of in my last letter, took place as announced, but did not reach, financially, the expectations of the committee in charge. This no doubt was owing to the fact that the latter part of the day and the early evening proved stormy, which of course diminished the attendance and proved disastrous to the entire programme.

On the evening of June 23rd we held our regular election of officers, with the following results: John Engel, President; W. L. Markey, Vice-President; Geo. Miller, Recording Secretary; J. D. Betting, Financial Secretary; F. Eldred, Trustee; W. Conklin, Foreman; J. Keddy, Inspector; your humble servant being re-elected Press Secretary; Elder Jas. Bruce still remaining Treasurer, as his term of office has not expired. The delegates to the Trades Assembly are as follows: Elder Jas. Bruce, John Engel, J. D. Betting, F. Eldred and Geo. Miller. To Labor League, Messrs. Birch, Krouskie and Fitzpatrick.

These selections of officers are excellent, as they are all gentlemen of ability and activity (except the Press Secretary), and we feel safe in saying that No. 70 must prosper during their administration.

It was my intention this month to write an article on the silver question, but since our picnic I have concluded to defer that subject until after election.

WALTER V. CLUTE, *Press Secretary.*

Patent Record.

The following recent electrical patents are reported by Longan, Higdon & Higdon, patent lawyers, second floor Odd Fellows' Building, St. Louis, and 48 Pacific Building, Washington, D.C.:

No. 559,872—System of electrical transportation, Philip K. Stern, St. Louis, Mo. An electric transportation system, consisting of a route or line of travel, a vehicle which is adapted to travel along said route, a primary inducing element, which is arranged along said route, and a laminated wheel mounted on said vehicle, which wheel is influenced by the primary element.

Directory of Local Unions.

(Secretaries will please furnish the necessary information to make this directory complete. Note that the time and place of meeting, the name of the President, the names and addresses of the Recording and Financial Secretaries are required.)

No. 1, St. Louis, Mo.—Meets every Tuesday at a. e. cor. 21st and Franklin avenue. F. P. Kinsley, Pres., 1801 Morgan St.; W. S. Peebles, R. S., 5147 Wells ave.; J. P. Casey, F. S., 7202 Spring ave.

No. 2, Milwaukee, Wis.—Meets 2d and 4th Wednesdays at Bauer's Hall, 34 W. Water st. M. J. Quirk, Pres., 87 27th st.; R. P. Marquardt, R. S., 750 17th st.; Geo. Pochmann, F. S., 647 24th st.

No. 3, Denver, Colo.—E. L. Layne, Pres., 1011 19th st.; Geo. P. Manning, Secy., 1633 Lawrence st.

No. 4, New Orleans, La.—Meets 1st and 3d Tuesdays at Carondelet & Perdido sts. J. McGregor, Pres., 2111 Rousseau st.; C. M. Hale, R. S., 620 St. Mary st.; R. H. Joyce, F. S., 3715 Bassin st.

No. 5, New York City, N. Y.—Meets every Thursday at 85 E. 4th st. John F. Bergen, Pres., 528 Henry st., Brooklyn; R. J. Baker, R. S., 96 Henry st., Brooklyn; M. E. Bergen, F. S., 515 Henry st., Brooklyn.

No. 6, San Francisco, Cal.—Meets 2nd and 4th Wednesdays at Forester's Hall, 20 Eddy st. F. Rush, Pres., room 329½ 6th st.; Geo. W. Frost, R. S., 672½ Natoma st.; W. N. Manning, F. S., R. 12, 109 5th st.

No. 7, Springfield, Mass.—Meets first and third Mondays at room 30, new Theatre Block. J. P. Malouey, Pres., 32 High st., Holyoke; H. B. Rust, R. S., Hotel Gilmore, G. T. McGilvray, F. S., City Hotel.

No. 8, Toledo, O.—Meets every Tuesday at Friendship Hall, cor. Jefferson and Summit sts. P. Crowley, Pres., 312 Vause st.; Wm. Callahan, R. S., 910 Vinton st.; J. W. Brumach, F. S., 223 Jerome st.

No. 9, Chillicothe, Ill.—Meets every Saturday at 184 E. Madison st. A. E. Duram, Pres., 523 Lake ave.; W. M. Stockwell, R. S., 184 Madison st.; H. Knapp, F. S., 67 Edson ave.

No. 10, Indianapolis, Ind.—Meets 1st and 3rd Monday at 29½ W. Pearl st. John Berry, Pres., care of headquarters Fire Dept.; W. O. Dudley, R. S., 124 E. Ohio st.; E. C. Hartung, F. S., Rooms 5-7 Cyclocaena Bldg.

No. 11, Terre Haute, Ind.—Meets 2d and 4th Tuesdays at 8th and Main sts. C. D. Updegraff, Pres., 529 S. Ninth st.; M. Davis, R. S., 918 N. Ninth st.; W. H. Schaefer, F. S., 114 N. 14th.

No. 12, Evansville, Ind.—Meets every Tuesday at cor. 3rd and Sycamore st. Harry Fisher, Pres., 20 Clark st.; A. L. Swanson, R. S., 154 Water st.; A. N. Grant, F. S., 20 Clark st.

No. 13, Memphis, Tenn.—Chas. E. Blake, Pres., 70 Mulberry st.; J. A. Mylcs, Secy., 207 De Soto st.

No. 14, Philadelphia, Pa.—Meets every Tuesday at 711 Spring Garden st. W. D. Smith, Pres., 254 Chester st.; H. G. Boyle, R. S., Tiger Hotel; H. C. Rawlins, F. S., 254 Chester st.

No. 15, Lynn, Mass.—Meet at General Electric Band Room, 94 South st. Jas. Robson, Pres., 46 W. Neptune st.; C. W. Perkins, R. S., 6 Allen's Court; E. J. Malloy, F. S., 66 Cottage st.

No. 16, Detroit, Mich.—Meets first and third Thursdays at Trades' Council Hall, 224 Randolph st. T. H. Forbes, Pres., 1220 16th st.; F. Campbell, R. S., 45 Abbott st.; J. G. Forbes, F. S., 745 Milwaukee ave. W.

No. 17, Kansas City, Mo.—Meets every Friday at 1015 Walnut st. W. L. Hutchinson, Pres., 1242 Broadway; D. C. Sprecher, R. S., 1208 McGee; J. H. Lytle, F. S., 1622 Jefferson st.

No. 18, Chicago, Ill.—Meets every Tuesday at 184 E. Madison st. P. Conklin, Pres., 702 S. Chicago av.; T. J. Prendergast, R. S., 7119S. Chicago av.; J. Drouin, F. S., 9132 S. Chicago ave.

No. 19, Wheeling, W. Va.—Meets first and third Tuesdays at Trades' Assembly Hall. H. F. Wyse, Pres., Box 311; C. L. Ullery, R. S., Box 111; W. J. Clark, F. S., McClure House.

No. 20, Omaha, Neb.—Meets every Friday in The Labor Temple. J. S. Tobias, Pres., 1615 Dorcas st.; K. Kincaid, R. S., 223 N. 16th st.; J. W. Walters, F. S., 2211 Pierce st.

No. 21, St. Paul, Minn.—Meets second and fourth Fridays at Labor Hall, 3rd and Wabasha sts. Jno. O'Donnell, Pres., 4th & Wabasha sts.; Thos. O'Toole, R. S., 333 E. 6th st.; F. Volk, F. S., 175 W. 6th st.

No. 22, Minneapolis, Minn.—Meets 1st and 3rd Wednesdays at 34 and 36 6th st. S. Geo. Helling, Pres., 18 9th st.; L. R. Stevens, R. S., 18 Western ave.; A. Aune, F. S., 3129 Longfellow ave.

No. 23, Duluth, Minn.—Meets 2d and 4th Thursdays at Room 6 Banning Bldg. R. Thayer, Pres., 25th Ave. W. & 1st st. F. A. Schulze, R. S., Room 18 Norris Block; L. P. Runkle, Fin. Sec., Room 17 Norris Block.

No. 24, Washington, D. C.—Meets every Friday at 827 7th st. N. W. G. A. Malone, Pres., 48 L. st. N. W.; M. O. Spring, R. S., 815 11th st. N. W.; R. F. Metzler, F. S., 509 11th st., N. W.

No. 25, Baltimore, Md.—Meets every Monday at Hall, cor. Fayette and Park ave. F. H. Wissinger, Pres., 74 W. Fayette st.; J. P. Jones, R. S., 1607 W. Franklin st.; F. H. Russell, F. S., 118 Fifteenth st.

No. 26, Louisville, Ky.—Meets first and third Tuesdays at Beck Hall, 1st near Jefferson st. Calvin Beach, Pres., 1020 W. Market st.; Ed. Herpt, R. S., 607 Magnolia st.; Jno. C. Deibel, F. S., 118 Fifteenth st.

No. 27, Atlanta, Ga.—Meets every Sunday at 61½ Alabama st. Geo. Foster, Pres., 100 Walker st.; D. J. Kerr, R. S., 114 Richardson st.; Geo. Knmyer, F. S., 121 Rhodes st.

No. 28, Cincinnati, O.—Meets 1st and 3d Mondays at 136 E. Court st. W. Williams, Pres., 605 Broadway; H. C. Genrich, R. S., 402 E. 3rd st.; J. F. Harnuth, F. S., 218 Vernon st., Clifton Heights.

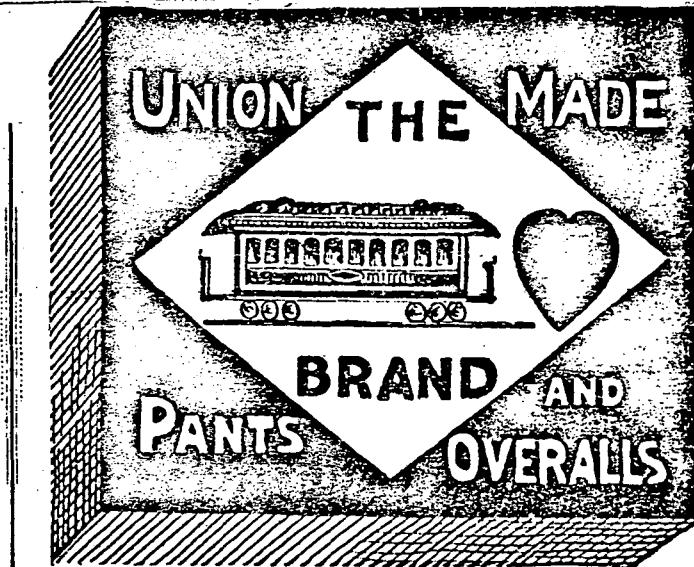
No. 29, Jersey City, N. J.—Meets 2d and 4th Thursdays at 116 Newark ave. Thos. Watson, Pres., 513 Jersey ave.; F. J. Anderson, R. S., 73 Sussex st.; T. L. Jones, F. S., 36 Wayne st.

No. 30, Paterson, N. J.—Meets 1st and 3d Mondays at German Union Hall. J. F. Colvin, Pres., 963 Madison ave.; Jos. Maher, R. S., 34 Grand st., Paterson Heights, Paterson, N. J.; John Kane, F. S., 274 Hamilton ave.

No. 31, Newark, N. J.—Meets every Monday evening at No. 38 Williams st. W. J. Curtis, Pres., 12 Beach street; J. M. Eder, R. S., 180 Market st.; W. E. Rosseter, F. S., 175 Sherman ave.

No. 32, Brooklyn, N. Y.—Meets 2d and 4th Fridays at Peters' Hall, 30 Fulton st. K. W. Latham, Pres., 151 Gates ave.; G. H. Collins, R. S., 81 St. Mark's pl.; G. C. Paine, F. S., 151 Gates ave.

No. 33, Boston, Mass.—Meets 1st and 3d Wednesdays at Well's Memorial Hall, 967 Washington st. M. Birningham, President, 99 Dustin st., Allston; E. Colvin, R. S., 258 Lincoln st., Allston; J. Bateman, F. S., 2 Pine Place.



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No. 36, Sacramento, Cal.—Walter Ross, Pres., 1030 G st.; R. A. Fisk, R. S., 1224 3rd st.; Wm. Laine, F. S., 403 K street.

No. 37, Hartford, Conn.—Meets first and third Fridays at Central Union Labor Hall, 11 Central Row. M. F. Owens, Pres., 63 Hawthorne st.; D. F. Cronin, R. S., 49 Windsor st.; C. E. Byrne, F. S., 16 John st.

No. 38, Cleveland, O.—Meets every Thursday at Room 10, Superior st. W. Cunningham, Pres., 409½ Ontario st. F. C. Locke, R. S., 131 Bolivar st.; H. T. Race, F. S., 137 Marvin ave.

No. 39, Providence, R. I.—Meets 1st and 3rd Mondays at Phoenix Bldg., 157 Westminster st. H. B. Kelly, Pres., 1950 Westminster st.; M. L. Carter, R. S., 40 Wilson st.; G. D. Higgins, F. S., 8 Carpenter st.

No. 40, St. Joseph, Mo.—Meets every Monday at north-west corner 8th and Locust sts. "Brook's Hall." R. M. Martin, Pres., 1702 N. 3d st.; Wm. Dorsel, Rec. Sec., 1708 Calhoun st.; J. C. Schneider, Fis. Sec., 813 S. 5th st.

No. 41, Philadelphia, Pa.—Meets every Thursday at 11 N. E. Cor. 8th and Callowhill sts.; Geo. A. Neal, Pres., 3625 Wharton st.; C. L. Elliott, R. S., 1721 Stillman st.; W. C. Fisher, F. S., 284 Park ave.

No. 42, Utica, N. Y.—Meets second and fourth Tuesdays at Room No. 5, Western Union Building. L. S. Ward, President, Room 5, Western Union Building; E. S. Allen, Recording Secretary, Room 5, Western Union Building; C. Richardson, F. S., Room 5, Western Union Building.

No. 43, Dayton, O.—J. J. McCarty, Pres., care of 5th st. R. R. Co.; L. O. Williams, R. S., 1135 W. 3d st.; F. Dewitt, F. S., 420 E. 2d st.

No. 44, Rochester, N. Y.—T. J. Keenan, Pres., 76 Oak st. John Riley, R. S., 398 Plymouth ave.; P. H. Brennan, F. S., care W. U. Tel. Co., 15 Reynolds' Arcade.

No. 45, Buffalo, N. Y.—Meets 1st and 3rd Saturdays at 512 Washington st. Wm. Haley, Pres., 262 Pearl st.; G. E. Johnson, R. S., 10 E. Eagle st.; H. L. Mack, F. S., 867 Washington st.

No. 46, Reading, Pa.—Lucian Bowman, President; Harry Weidner, Recording Secretary, 225 Pearl street; W. S. Hoffman, Financial Secretary, 109 Peach street.

No. 47, Boston, Mass.—Meets every 2d & 4th Thursday at 967 Washington st. R. C. McCarthy, Pres., 192 Fustis st.; Roxbury, A. E. Gibbons, R. S., 82 Bartlett st., Charlestown; W. H. Nichols, F. S., Pleasant st., Roxbury.

No. 48, Sedalia, Mo.—Meets every Thursday at Second and Ohio streets. C. E. Jackson, President; C. C. Ballard, Recording Secretary, 228 Vermont avenue; Ed. McCoy, Financial Secretary, 1210 E. Eleventh street.

No. 49, Bloomington, Ill.—Meets 1st and 3d Wednesdays at Trades' Assembly Hall, C. F. Suyder, Pres., Box 1015; W. C. Gorey, R. S., 409 S. Madison st.; W. F. Witly, F. S., 421 N. Madison st.

No. 50, Birmingham, Ala.—Meets first and third Fridays at 201 20th ave. C. L. Montgomery, Pres., 620 18th st.; T. A. Thompson, R. S., 2020 10th ave.; P. F. Beatty, F. S., 311 20th street.

No. 51, Scranton, Pa.—Jas. Harding, Pres., 601 Meridian st.; P. Campbell, K. S., 1210 Irving av.; Kuben Robins, F. S., 1223 Hampton st.

No. 52, Wilkes-Barre, Pa.—W. B. Coe, President, 141 N. River street; W. F. Barber, Recording Secretary, 415 Wyoming avenue, W. Pittston, Pa.; B. M. Lewis, Financial Secretary, American Tel. and Tel. Company.

No. 53, Harrisburg, Pa.—John Moyer, Pres., Balm and Rainius sts.; Jas. E. Emlinger, R. S., 25 N. 15th st.; C. Anderson, F. S., 46 Summit st.

No. 54, Peoria, Ill.—Meets 1st & 3d Wednesdays at 301 Main st. H. Schearer, Pres., 219 W. Jefferson st.; Harry Duson, Rec. Sec., East Peoria; L. C. Crawley, Fin. Sec., 115 Washington st.

No. 55, Des Moines, Ia.—Meets first and third Tuesdays at Trades' Assembly Hall. L. M. Standman, President, 114 E. Thirteenth street; Ed. Purcell, Recording Secretary, 1020 E. Sixth street; J. C. Dantremont, Financial Secretary, 316 N. Seventh street.

No. 56, Boston, Mass.—Meets 2d and 4th Wednesdays at 45 Elliott st. J. Murphy, Pres., 301 Tremont st.; D. J. Burnett, R. S., 98 Silver St., Boston; J. H. DeCourcey, F. S., 79 Smith st., Roxbury.

No. 57, Salt Lake City, Utah.—Meets second and fourth Thursdays. F. Smith, Pres., care Citizens Electric Lt. Co.; J. A. Ackley, R. S., 232 State st.; E. Mill, F. S., 67 Main st.

No. 58, West Superior, Wis.—Meets first and third Wednesdays at rooms 3 and 4, 1602 3d st. K. F. Pfleger, Pres., Superior Water, Light & Power Co.; G. C. Hehl, R. S., 45 Hughton ave.; H. Burdette, F. S., 1819 Banks ave.

No. 59, Paducah, Ky.—J. B. Eretts, Pres., No. 2 Eugine House; W. S. Nelson, R. S., 220 S. 4th st.; W. A. Koenenau, F. S., 220 S. 4th st.

No. 60, San Antonio, Tex.—Meets every Saturday at Milham Hall, Soleciad Block. T. L. Rose, Pres., 215 Powder House st.; Alvin Ellis, R. S., 1414 Pine st.; John Lindquist, F. S., 520 Cypress st.

No. 61, Los Angeles, Cal.—A. McFarlane, Pres., 215 S. Hill st.; P. E. Peters, R. S., 842 Bellevue ave.; C. P. Loftouse, F. S., 210 San Julian st.

No. 62, Kalamaazoo, Mich.—A. D. Ayres, Pres.: 534 S. Sundick st.; L. Belman, R. S., 540 Pine st.; Wm. Huschack, F. S., 132 W. Cedar st.

No. 63, Tampa, Fla.—Theo. Glinn, President, Pt. Tampa City; W. F. Crofts, Recording Secretary, Lock Box 261; Arthur D. Henry, Financial Secretary, Box 220.

No. 64, Houston, Tex.—Meets every Monday. J. W. Howard, Pres., 1715 Houston ave.; S. T. Stiles, R. S., 108 McKee st.; F. A. Peters, F. S., care of 10th Messenger Service.

No. 65, Quincy, Ill.—D. M. Mallinson, Pres., 1120 Vine st.; Ed. Haise, R. S., 701 Main st.; W. F. Wagner, F. S., 1341 Chestnut st.

No. 66, Little Rock, Ark.—C. J. Griffith, Pres., 15th and Rooker st.; G. W. Wilson, R. S., 825 Marshall st.; W. N. Drogan, F. S., 1622 W. 3d st.

No. 67, Richmond, Va.—Meets 1st & 4th Wednesdays at 613 N. Third st. (in rear). H. Vaughan, Pres., 90 N. Seventh st.; J. A. Moss, R. S., 419 W. Duval st.; S. R. Kelly, F. S., 613 N. 3rd st.

No. 68, Schenectady, N. Y.—Meets 2d and 4th Tuesdays at Trades' Assembly Hall, cor. Centre and State sts., 3d floor. John Engel, Pres., 114 Barrett st.; Geo. Miller, R. S., 30 Ellis st.; J. D. Betting, F. S., 626 Ville road.

No. 69, Galveston, Tex.—Meets 2nd and 4th Wednesdays. Oliver Lorenzo, Pres., 1606 Tremont st.; D. L. Goble, R. S., 3320 Ave. K/2; L. C. Castetter, F. S., 222 Post-office st.

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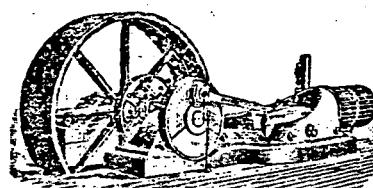
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